

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Tobias Schneider
Serial No.:	10/501,700
Date Filed:	July 16, 2004
Group Art Unit:	2626
Confirmation No.:	5094
Examiner:	Saint Cyr, Leonard
Title:	<b>OPERATING METHOD FOR AN AUTOMATED LANGUAGE RECOGNIZER INTENDED FOR THE SPEAKER-INDEPENDENT LANGUAGE RECOGNITION OF WORDS IN DIFFERENT LANGUAGES AND AUTOMATED LANGUAGE RECOGNIZER METHOD FOR ALLOCATION OF TRANSMISSION CHANNELS IN A MOBILE RADIO CELL FOR AN MULTICAST SERVICE</b>

**MAIL STOP – AF**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Applicant requests review of the final rejection issued in the Office Action mailed June 1, 2009 ("Final Office Action"). No amendments are being filed with this request. At the time of the Final Office Action, Claims 12-29 were pending in this Application. Claims 12-29 stand rejected. Claims 1-11 were previously cancelled without prejudice or disclaimer. This Request is being filed concurrently with a Notice of Appeal.

Applicant respectfully requests review of the final rejections for the following reasons.

**ARGUMENTS**

**Rejections under 35 U.S.C. §103**

Claims 12-13, 20-22, and 28-29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,085,160 issued to Bart D'hoore et al. ("*D'hoore*") in view of U.S. Patent Application Publication No. 2003/0050779 by Soren Riis et al. ("*Riis*").

Claims 14-16 and 23 were rejected under 35 U.S.C. §103(a) over of *D'hoore* in view of *Riis*, and further in view of U.S. Patent No. 6,460,017 issued to Udo Bub et al. ("*Bub*").

Claims 17 and 24-25 were rejected under 35 U.S.C. §103(a) over of *D'hoore* in view of *Riis*, further in view of *Bub* and further in view of U.S. Patent No. 7,047,493 issued to Eric D. Brill et al. ("*Brill*").

Claims 18-19 and 26-27 were rejected under 35 U.S.C. §103(a) over of *D'hoore* in view of *Riis*, and further in view of U.S. Patent Application Publication No. 2004/0039570 filed by Steffen Harengel et al. ("*Harengel*").

In order to establish a prima facie case of obviousness, the references cited by the Examiner must disclose all claimed limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Even if each limitation is disclosed in a combination of references, however, a claim composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). Rather, the Examiner must identify an apparent reason to combine the known elements in the fashion claimed. *Id.* "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.*, citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Finally, the reason must be free of the distortion caused by hindsight bias and may not rely on ex post reasoning. *KSR*, 127 S.Ct. at 1742. In addition, evidence that such a combination was uniquely challenging or difficult tends to show that a claim was not obvious. *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc. and Mattel, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007), citing *KSR*, 127 S.Ct. at 1741.

The Proposed Combination of *D'hoore* and *Riis* is Improper.

Applicant explained in the Response to Office Action dated August 28, 2008 that *D'hoore* and *Riis* cannot be properly combined as alleged by the Examiner. However, the Examiner did not respond to this argument in the Final Office Action. Thus, Applicant restates this argument and respectfully request consideration of the argument.

To justify the combination of the references, the Examiner makes conclusory statements that it “would be obvious to one of ordinary skill in the art at the time the invention was made to generate inter- and intra-language pronunciation variations as taught by Riis et al., in *D'hoore* et al. because that would help improve the overall system performance of generating multilingual text-to-phoneme mappings (*Riis et al.*, Abstract).” Final Office Action, Page 4. However, Applicant notes that no evidence in the cited references, or any other evidence or record supports this statement. Even if each limitation is disclosed in a combination of references, which Applicant does not concede, a claim composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). Rather, the rationale to support a conclusion that

the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention. It can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art.

*Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc.*, Federal Register / Vol. 72, No. 195, at 57529 (emphasis added).

Furthermore, the Examiner has failed to show that the proposed combination would yield reasonable expectation of success. For example, the Examiner has failed to provide

how combining a text-to-phoneme method as disclosed in *Riis* would work in a speech recognition system that uses language independent acoustic models derived from speech data as disclosed in *D'hoore* would yield reasonable expectation of success.

Accordingly, Applicant respectfully submits that the proposed combination of *D'hoore* and *Riis* is improper, and therefore request withdrawal of the rejection.

*D'hoore* and *Riis* do not teach or suggest all limitations of Applicant's claims.

In order to establish a prima facie case of obviousness, the references cited by the Examiner must disclose all claimed limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Applicant respectfully submits that *D'hoore* and *Riis* fail to teach or suggest all the limitations of independent Claims 12 and 22. For example, regarding Claim 12, the cited references each fail to teach or suggest:

(c) determining a phoneme map by mapping the generated first phoneme sequences of each of said *N* languages to a relevant phoneme set of the mother tongue;

(d) determining *N* second phoneme sequences corresponding to *N* second pronunciation variants from said phoneme map for each word;

As discussed in Applicant's Response to Final Office Action, the Examiner argued in the Final Office Action that column 8, lines 13-20 of *D'hoore* inherently teaches mapping the first phoneme sequences of each of said *N* languages to a relevant phoneme set of the mother tongue. (Final Office Action, page 2). Thus, the Examiner appeared to acknowledge that *D'hoore* does not *expressly* teach mapping of first phoneme sequences of each of *N* languages to a relevant phoneme set of the mother tongue, but instead inherently teaches this limitation. Applicant explained that the Examiner did not met the legal burden for making a rejection based on inherency, as set forth by M.P.E.P. 2112(IV) and the Federal Circuit. Specifically, the Examiner did not met his mandatory burden of showing that *D'hoore's* teaching of using multiple phonetic transcriptions for pronunciation variants for several languages in parallel necessarily includes mapping of first phoneme sequences of each of *N* languages to a relevant phoneme set of the mother tongue. Applicant then explained how

*D'hoore's* system could simply store the multiple phonetic transcriptions for pronunciation variants for several languages in a library or dictionary, and access each of the phonetic transcriptions in parallel, without mapping them to a phoneme set of the mother tongue. Thus, *D'hoore's* system does not necessarily include mapping of first phoneme sequences of each of N languages to a relevant phoneme set of the mother tongue, and therefore, *D'hoore* cannot inherently teach this limitation.

Presumably acknowledging that the inherency rejection could not be maintained, in the Advisory Action the Examiner simply restated his argument from the Final Office Action, nearly word for word, but removed the word "inherent." Thus, it appears that the Examiner initially acknowledged that *D'hoore* does not *expressly* teach mapping of first phoneme sequences of each of N languages to a relevant phoneme set of the mother tongue, but later when confronted with the weakness of an inherency rejection, changed his position to argue that *D'hoore* does expressly teach this feature. Applicant respectfully submits that column 8, lines 13-20 of *D'hoore* clearly does not expressly teach this feature of Applicant's invention. Column 8, lines 13-20 teaches

... The system will transcribe the word with rule sets from several languages and generate several phonetic transcriptions. The recognizer uses all the transcriptions in parallel, thus covering all pronunciation variants. This is particularly useful for recognizing proper names in an application that will be used by a variety of speakers whose language is not known.

Thus, *D'hoore* teaches generating several phonetic transcriptions, and then using them all in parallel to cover all pronunciation variants. There is no mention or even suggestion of any mapping of phoneme sequences, much less mapping phoneme sequences of the several phonetic transcriptions to a relevant phoneme set of the mother tongue. Thus, this passage clearly falls short of *expressly* teaching this feature of Applicant's invention, and Applicant has already explained (and the Examiner has apparently agreed) that *D'hoore* does not *inherently* teach this feature.

Accordingly, *D'hoore* does not teach the limitations of Claim 12 recited above, or similar limitations of independent Claim 22. Additionally, *Bub*, *Brill*, and/or *Harengel* each fail to teach or suggest all the elements of Claims 12 and 22.

For at least the reasons discussed above, Applicant respectfully requests reconsideration and allowance of amended independent Claims 12 and 22 and all claims that depend therefrom.

**Conclusion**

Applicant submits this Pre-Appeal Brief Request for Review along with a Notice of Appeal. Applicant authorizes the Commissioner to charge Deposit Account No. 50-4871 in the amount of \$540.00 for the Notice of Appeal fee.

Applicant also respectfully submits a Petition for One-Month Extension of Time. The Commissioner is authorized to charge the fee of \$130.00 required to Deposit Account 50-4871 in order to effectuate this filing.

Applicant believes there are no further fees due at this time; however, the Commissioner is hereby authorized to charge any additional fees necessary or credit any overpayments to Deposit Account No. 50-4871 of King & Spalding LLP.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicant's attorney at 512.457.2030.

Respectfully submitted,  
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